This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

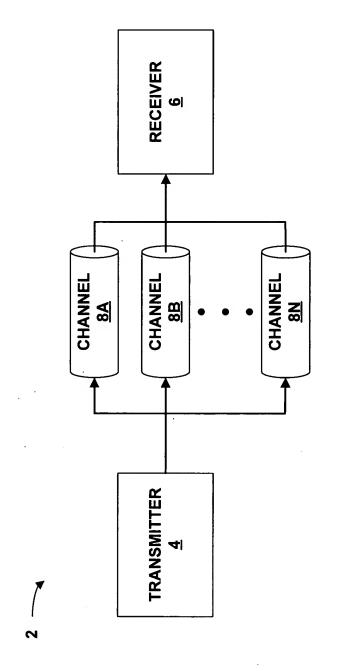
Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

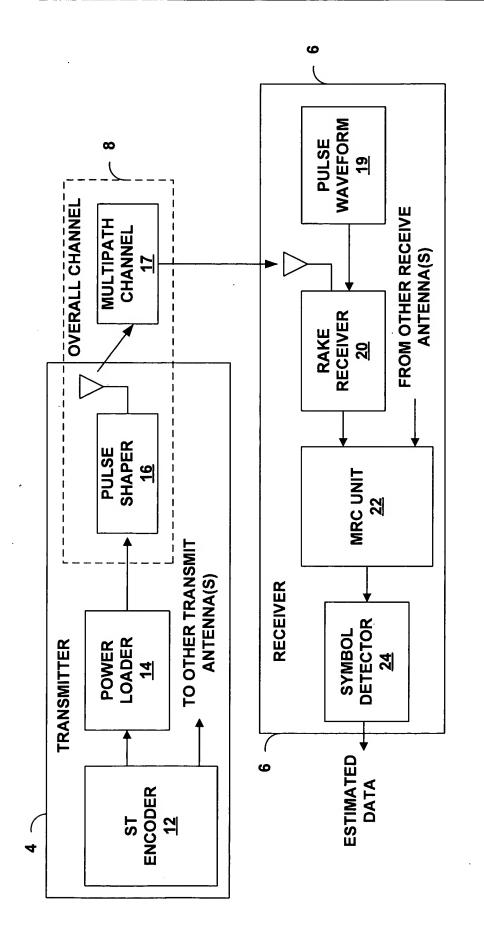
As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

APPLICANT: GEORGIOS GIANNAKIS AND LIUQING YANG
TITLE: SPACE-TIME CODING FOR MULTI-ANTENNA ULTRA-WIDEBAND TRANSMISSIONS
ATTORNEY/AGENT: KENT J. SIEFFERT
REG. NO. 41,312 TELEPHONE: 651.735.1100
DOCKET NO.: 1008-013US01 SHEET 1 OF 14



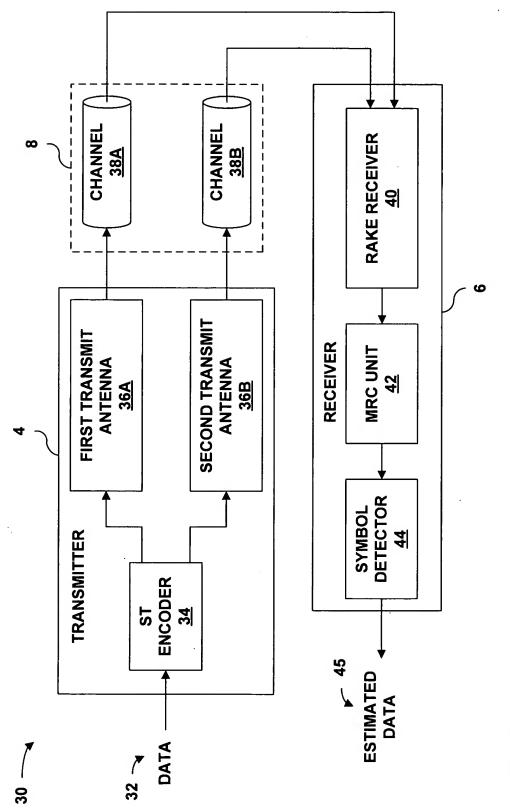
REG. NO. 41,312 TELEPHONE: 651.735.1100 DOCKET NO.: 1008-013US01 SHEET

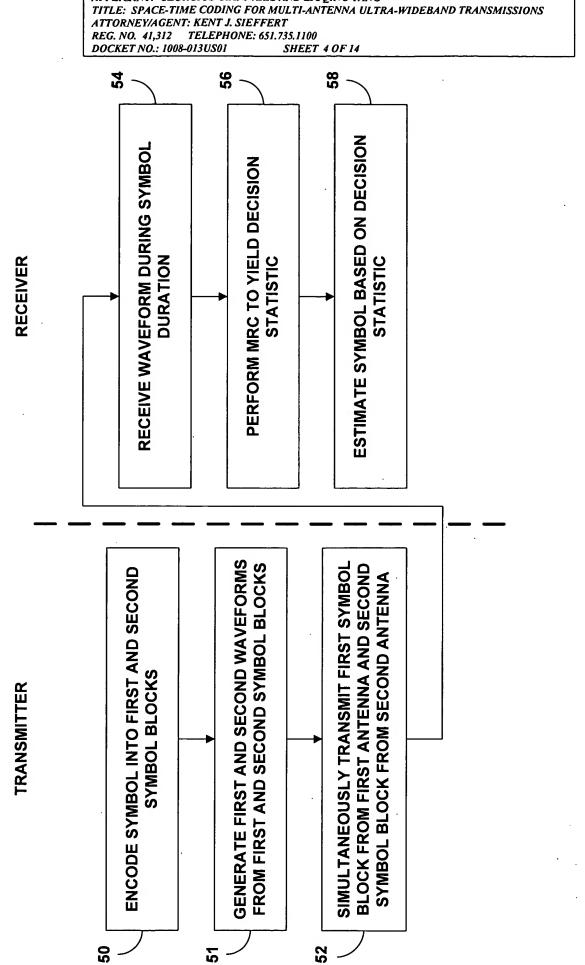
SHEET 2 OF 14



REG. NO. 41,312 TELEPHONE: 651.735.1100

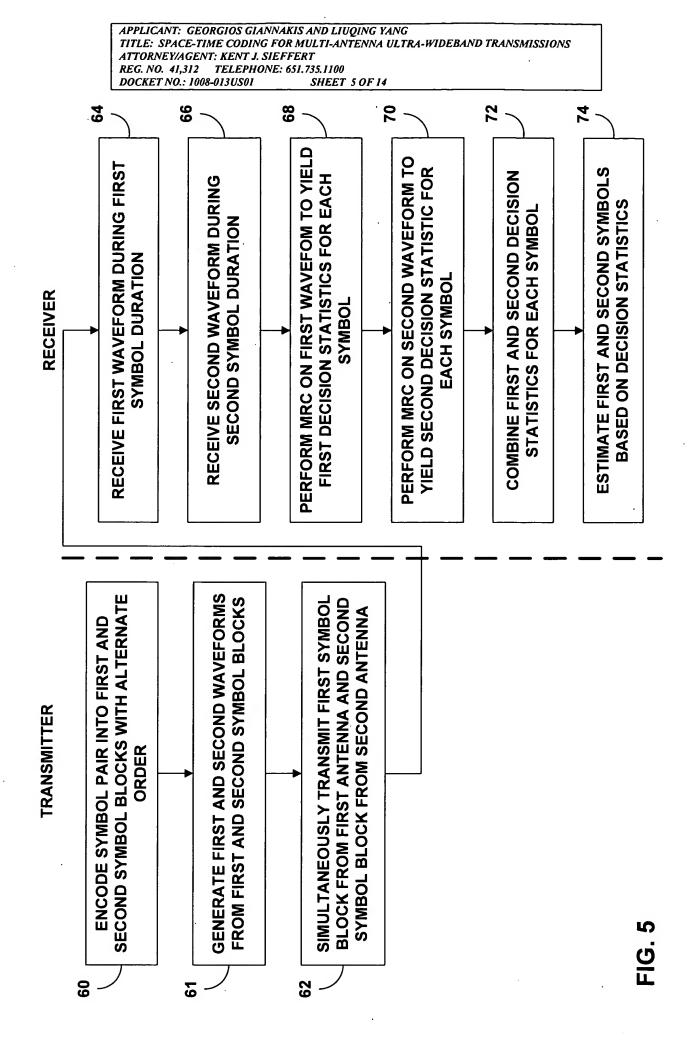
DOCKET NO.: 1008-013US01 SHEET 3 OF 14





APPLICANT: GEORGIOS GIANNAKIS AND LIUQING YANG

<u> 16. 4</u>



REG. NO. 41,312 TELEPHONE: 651.735.1100 DOCKET NO.: 1008-013US01 SHEET 6 OF 14

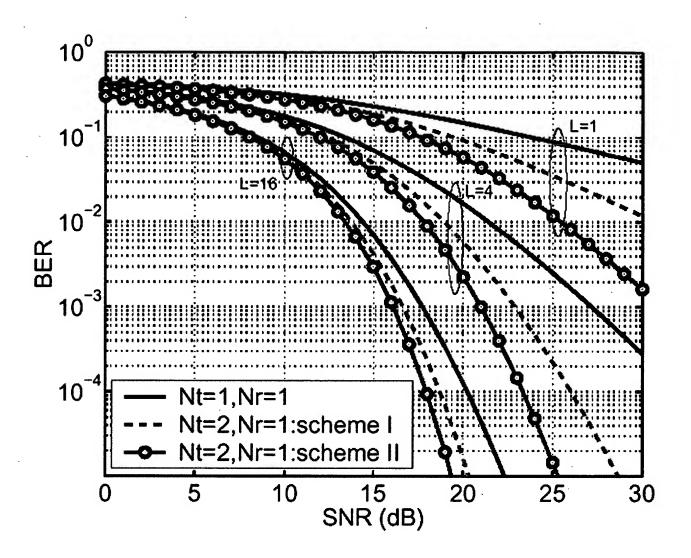


FIG. 6

REG. NO. 41,312 TELEPHONE: 651.735.1100 DOCKET NO.: 1008-013US01 SHEET 7 OF 14

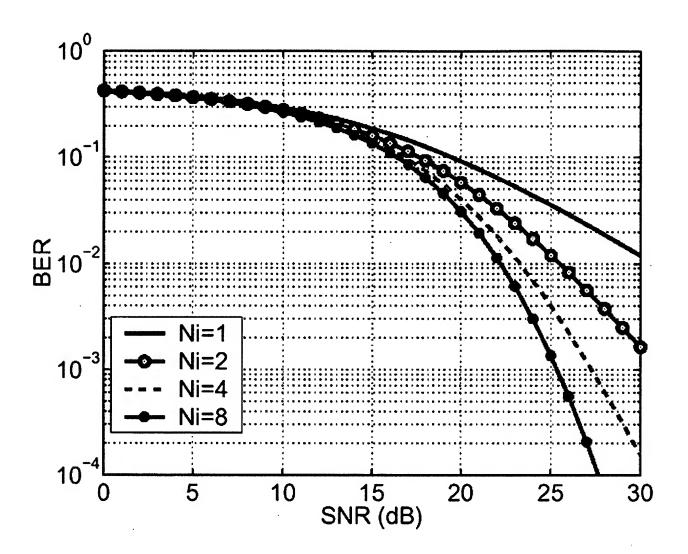
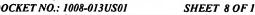


FIG. 7

APPLICANT: GEORGIOS GIANNAKIS AND LIUQING YANG
TITLE: SPACE-TIME CODING FOR MULTI-ANTENNA ULTRA-WIDEBAND TRANSMISSIONS
ATTORNEY/AGENT: KENT J. SIEFFERT
REG. NO. 41,312 TELEPHONE: 651.735.1100
DOCKET NO.: 1008-013US01 SHEET 8 OF 14



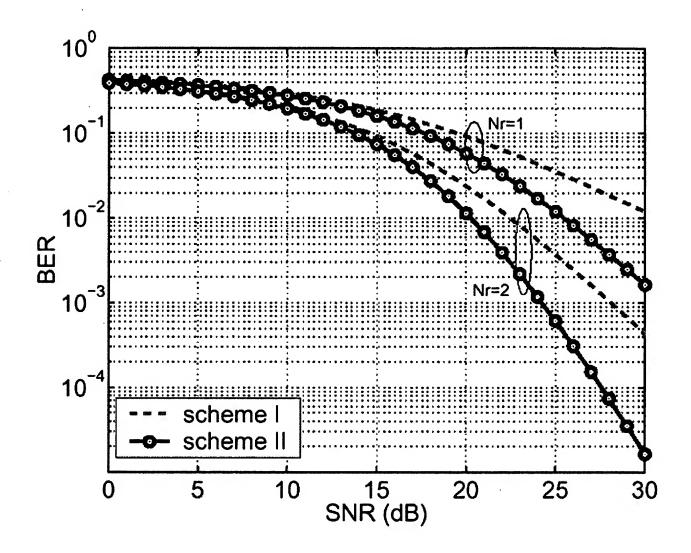


FIG. 8

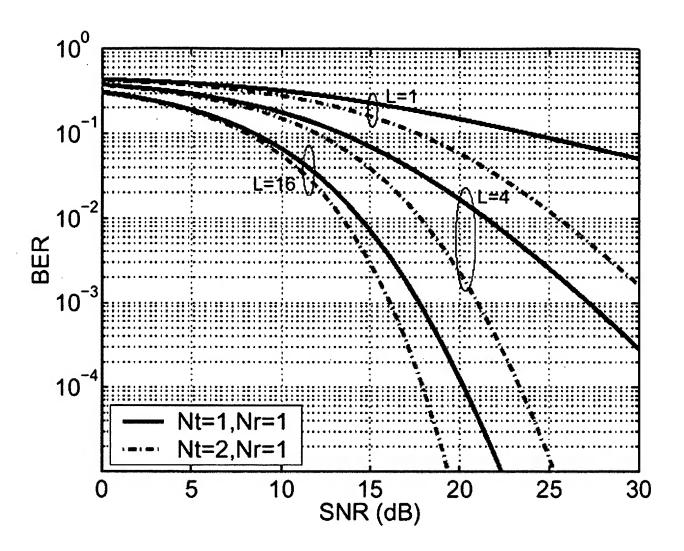


FIG. 9

REG. NO. 41,312 TELEPHONE: 651.735.1100 DOCKET NO.: 1008-013US01 SHEET 10 OF 14

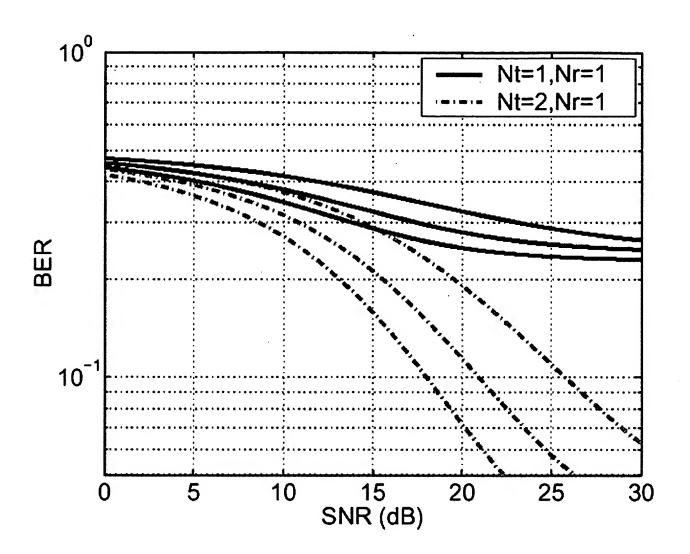


FIG. 10

REG. NO. 41,312 TELEPHONE: 651.735.1100 DOCKET NO.: 1008-013US01 SHEET 11 OF 14

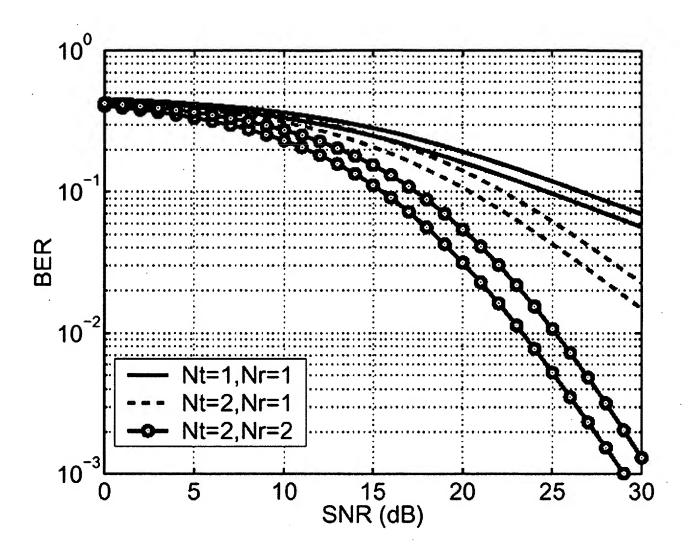


FIG. 11

APPLICANT: GEORGIOS GIANNAKIS AND LIUQING YANG
TITLE: SPACE-TIME CODING FOR MULTI-ANTENNA ULTRA-WIDEBAND TRANSMISSIONS
ATTORNEY/AGENT: KENT J. SIEFFERT
REG. NO. 41,312 TELEPHONE: 651.735.1100
DOCKET NO.: 1008-013US01 SHEET 12 OF 14

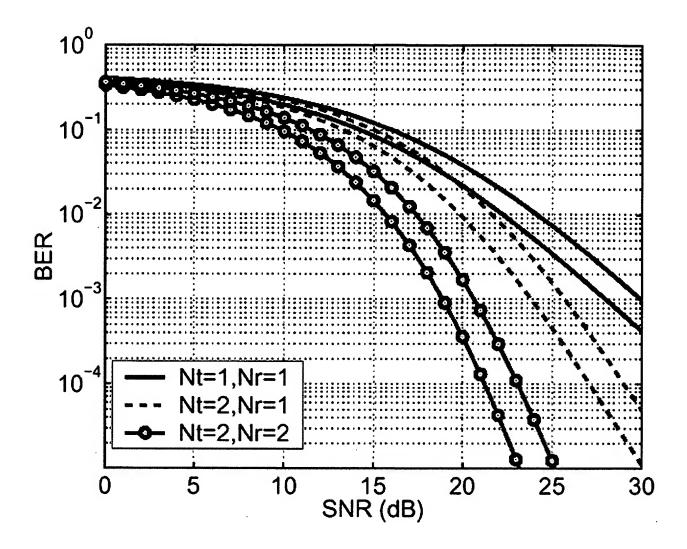


FIG. 12

APPLICANT: GEORGIOS GIANNAKIS AND LIUQING YANG
TITLE: SPACE-TIME CODING FOR MULTI-ANTENNA ULTRA-WIDEBAND TRANSMISSIONS
ATTORNEY/AGENT: KENT J. SIEFFERT
REG. NO. 41,312 TELEPHONE: 651.735.1100
DOCKET NO.: 1008-013US01 SHEET 13 OF 14

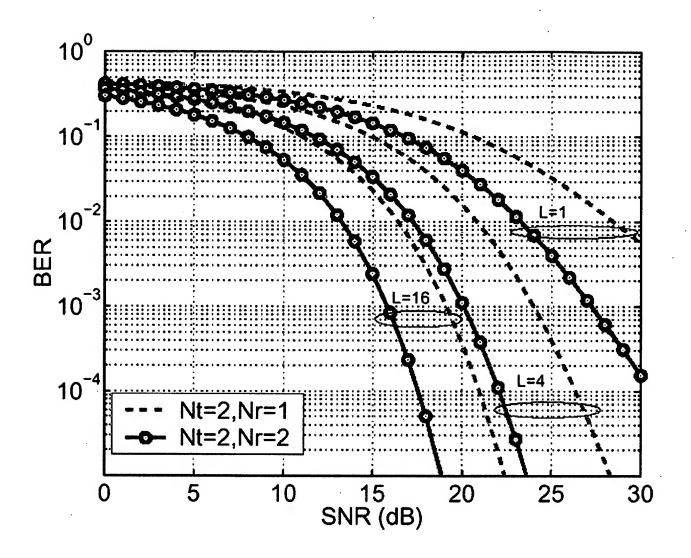


FIG. 13

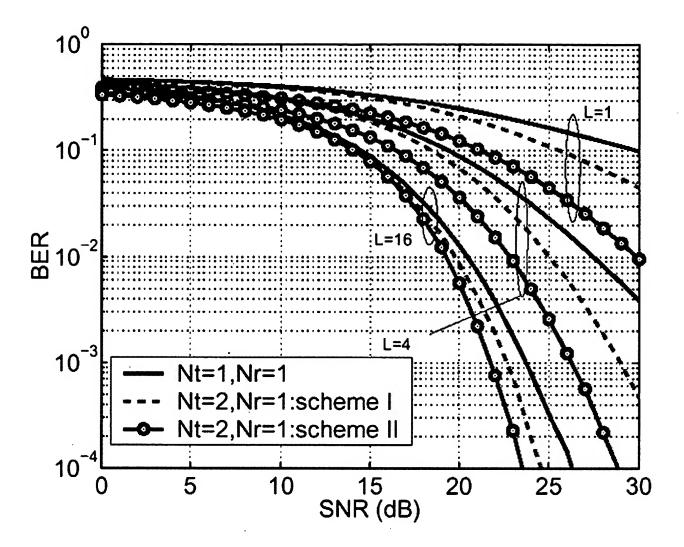


FIG. 14